



## Formulating one health policy for Nipah Outbreak in India: A neglected agenda

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Dear editor,

In India, it is high time to focus on one health approach to address the emerging/reemerging disease. The fight between microbe and man influence the inexorable archenemy that needs to be dealt. Since Second World War, there has been an average increase in emergence or reemergence of new diseases particularly from an animal source (75%)[1]. India is identified as a major hotspot area for infectious diseases in South Asia regarding zoonoses[2]. As this emergence of India as a Zoonotic hotspot, the consequence of it to further on other region and global health raises queries to global preparedness concerning epidemic potential.

The recent outbreak of Nipah in India has caused major threat to Indian population and government to focus on One health approach for addressing the Emerging infectious diseases. Being in an uncertain environment to occur sudden outbreaks, the collaborative approach and cogent response need is formulated by resilient inter-sectoral linkages and coordination, rooted in trans and interdisciplinary approaches has been felt now[3,4].

Nipah virus is a zoonotic pathogen reported for the first time

in Malaysia in 1998 in a village known as Kampung Sungai Nipah which is transmitted from animals to humans. Fruit bats are considered as virus's natural host. Though the virus has been transmitted from pigs to human at Malaysia outbreak, it's exact mechanism is not clearly understood, as later outbreaks in the area of Bangladesh has been identified that infection spread happened through consuming contaminated date palm sap. The virus can be transmitted from humans to humans as well. As of 28th June, the Nipah outbreak has resulted in 17 casualties in Kerala state. The diagnosis is often very difficult to make during the time of presentation of Nipah cases. As the symptoms are similar with other neurological infections. 'Air-borne transmission of the virus can be ruled out, say health officials. WHO says humans could get infected if they come in direct contact with sick pigs or their contaminated tissues'[5]. Secretions from fruit bats or pigs and droplets can also lead to transmission. Since encephalitic-symptoms are seen in Nipah virus infections, the fundamental mode of treatment is limited to intensive supportive care for neurological and respiratory complications. There is no vaccine or drug cure for the Nipah virus infection presently although this is a priority disease

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on the WHO's agenda. Antivirals (Ribavirin, HR2-based fusion inhibitor), biologicals (convalescent plasma, monoclonal antibodies), immunomodulators and palliative care with intensive supportive treatment is applicable for human cases as per the recommendation of Indian Council of Medical Research.

Emerging and Reemerging diseases have been seeming like a human health problem, thus impeding sectorally integrated planning and policies. In the event of emergencies, confusion among sectoral and management capacity in the different sources ( human, animal and wildlife) lead to time-lapse and hinder the quick and necessary responses taken by the team, instead having collaborative approach with concerning one health would address the problem in time and can combat the emerging disease efficiently[6].

The key to this problem is by dealing it with a holistic approach, which is to establish linkages between the human health, animal health and husbandry, agriculture, and environment sectors. Targeting on one sector through collaboration with other sectors and performing action plan to alleviate the risks and adverse effects on the different sectors as well would be right decision to combat the emerging or re-emerging health issues that arise in this modern era. Sectorally integrated and inter-discipline action to combat the emerging infectious disease which has been alleged as a key to mitigating human threat in a current scenario[6].

## Conflict of interest statement

There is no conflict of interests.

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